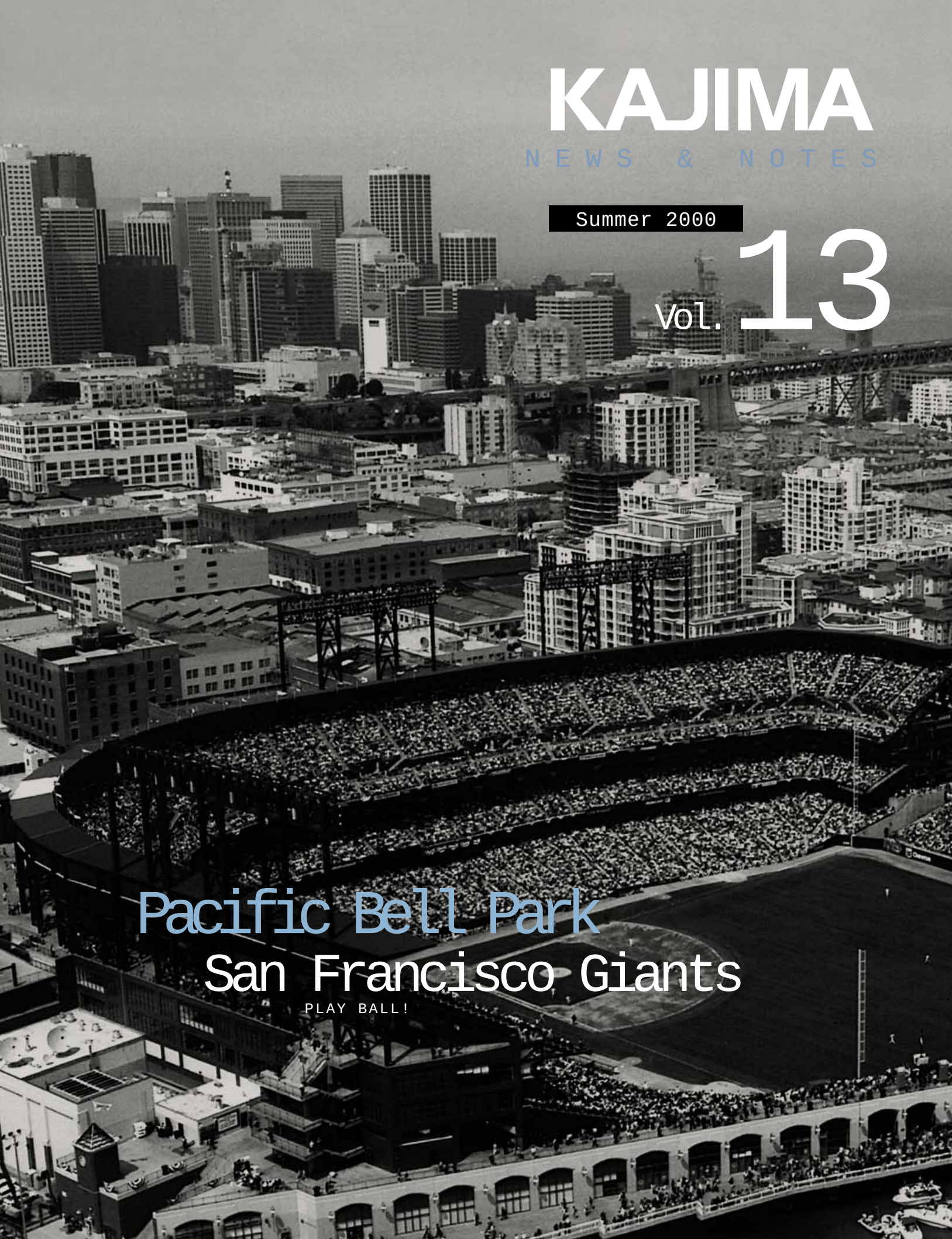


KAJIMA

NEWS & NOTES

Summer 2000

Vol. 13

Pacific Bell Park

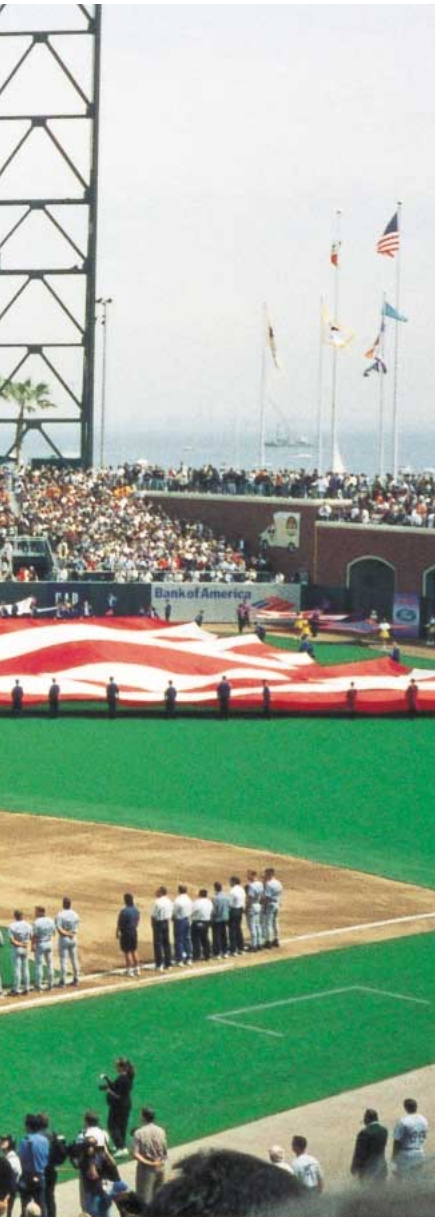
San Francisco Giants

PLAY BALL!

Pacific Bell Park

KUD International, LLC., a subsidiary of Kajima U.S.A. Inc., recently completed Pacific Bell Park, the new home of the San Francisco Giants. This project has been acclaimed as one of the best sports facilities in the United States.

The development of new sports facilities in the United States continues at an unprecedented pace. The driving force behind this expansion is not facility obsolescence but the need to increase the revenue-generating capacities of



individual sports franchises. As the availability of public funding for new facilities differs greatly from city to city, some franchises have had to devise creative financial approaches to facilities development.

Pacific Bell Park is an example of such creativity. San Francisco consistently denied the Giants public funding for a new stadium, forcing the Giants to attempt to build a ballpark with private funds. However, the last facility completed by such a feat was Los Angeles' Dodger Stadium in 1966. Undaunted by the challenge, the Giants began the process by defining the specific requirements of their ownership group. One of their first decisions was to designate KUD International as program manager, responsible for the critical task of leading a project team.

Kajima's Role

KUD International's first task was to hire a design and construction team. HOK Sport was selected to lead a team of 27 consulting firms to complete the facility's design. For the construction team, KUD International chose a joint venture formed by Kajima Construction Services and Huber, Hunt & Nichols, in light of those companies' combined experience with complex concrete structural systems, knowledge of seismic construction techniques, quality of staff, and experience working in San Francisco. During a 10-month preconstruction period, the design and construction teams worked closely to balance available funds with the required scope of work. In fall 1997, KUD International provided the Giants with a Guaranteed Maximum Development Price, which allowed the Giants to obtain the necessary financing.

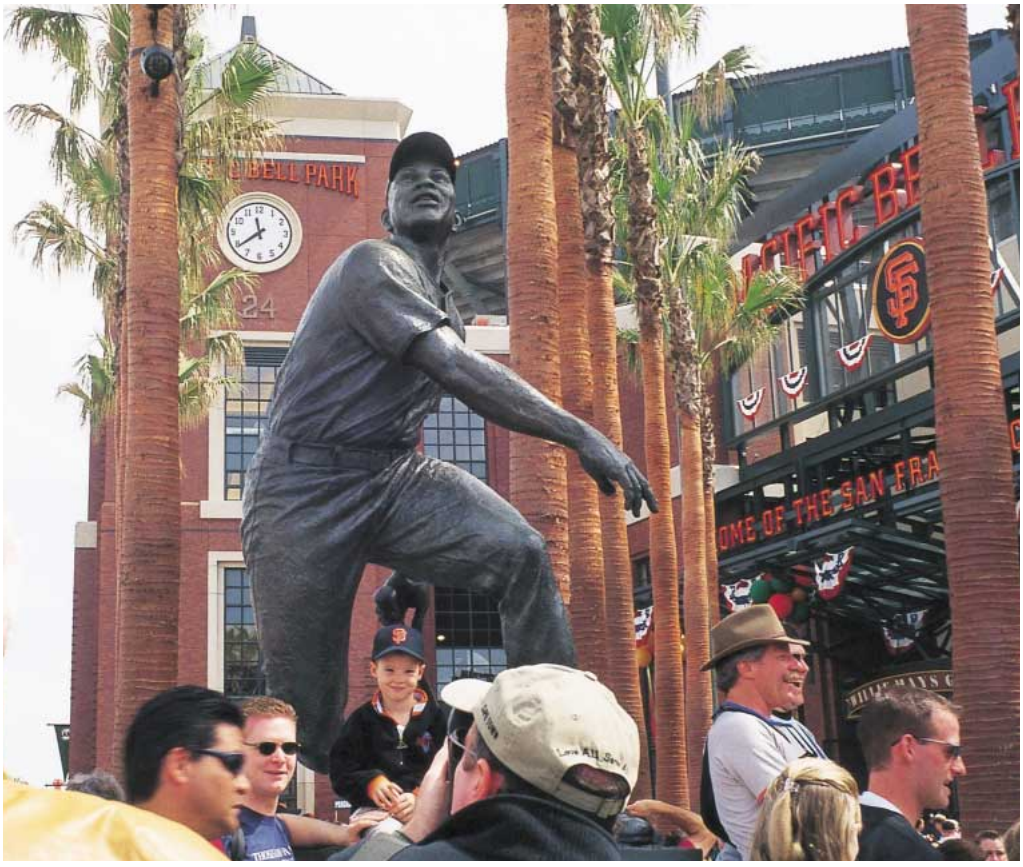
The Kajima team completed construction of the facility in 27 months, despite severe rainfall during that period. In fact, the stadium actually opened 45 days early, allowing the Giants to hold additional preseason games.

Design

The design selected for the facility incorporates architectural references that enhance the historical feel of the facility. The facility also incorporates technological improvements to satisfy the needs of the client well into the 21st century.

The stadium's site is adjacent to China Basin by the San Francisco Bay. As the area along China Basin was reclaimed from mud flats, it had very little structural capacity for supporting a heavy load. Working with geotechnical consultants, KUD International devised a complex system for preventing soil liquefaction. This system incorporates soil enhancement via rock columns, additional reinforcement of the existing concrete seawall, compaction grouting of existing voids, soil anchors as tiebacks, and a reinforced portwalk capable of tying the elements together and serving as the base for the outfield walls, seating bowl, and scoreboard structures.

The structural frame of the ballpark is predominantly reinforced concrete resting on 2,200 concrete piles. A concrete mat surrounds the building, tying the building together and resisting lateral forces imposed by earthquakes. Concrete was selected as the structural frame for two reasons. First, a steel system would have required a longer lead time. Second, a steel framework requires significant bracing and complex connections to meet strict building code requirements that reflect the high incidence of local earthquakes. Reinforced concrete was utilized up to the upper concourse level, where a structural steel frame extends to support the upper seating bowl.



This exposed steel frame is reminiscent of turn-of-the-century ballparks.

Provisions for seismic resistance and movement were made throughout the building. The structural foundations, grade beams, and main concourse are rigidly connected to form a unified base. The frame above the main concourse divides the building into six segments connected by18-inch-wide expansion joints, allowing each building segment to move independently during earthquakes. The skin of the building was constructed with panelized brick veneer that is resistant to seismic damage. Bracing for mechanical, electrical, plumbing, and signage systems was carefully engineered to minimize the appearance of any structural constraints and provide a pleasing appearance to architectural critics as well as history-conscious San Francisco citizens.

Project Team

As mentioned, Pacific Bell Park is the first U.S. ballpark to be built with private funds since 1966. Moreover, it is one of the only major sports projects to be constructed on time and on budget in the United States in the last 10 years. Faced with a limited budget and time period, KUD International worked with its partners to develop a method by which project savings could be returned to the Giants to enhance the stadium's design aesthetic. KUD International orchestrated the decision-making process required to incorporate upgrades to the facility and allow the construction team to accommodate changes without delaying the project's completion.

Partnering: A Concept for Success

One factor behind the project's successful completion was a "partnering" process designed to improve communication among team members and prevent claims between the owner, contractors, subcontractors, and designers. Partnering has recently been utilized on many public-sector projects in the United States, but its use on private-sector projects has been limited due to the reluctance of some companies to relinquish control of contractual rights.

KUD International engineered a modified form of partnering, whereby each level of project management was given specific tasks to address. Project issues that could be resolved at the project management level were handled among the project teams of the project manager, owner, architect, and contractors. Other issues were referred to a committee of executives from each entity, which passed solutions back to the project management level. This system allowed the project management team to focus on resolvable issues and the core goals of on-time and on-budget completion.

Kajima around the World

From Japan

The Sixth Kajima Sculpture Contest

The winners of the Sixth Kajima Sculpture Contest were recently presented with their awards at a ceremony held in the Kajima KI Building in Tokyo's Akasaka district. Organized to promote the creation of spaces in which sculptures and architecture harmoniously coexist, the Kajima Sculpture Contest has been held biennially since 1989. The first screening of works, held during September 1999, involved the selection of eight semifinalist works from a total of 278 submitted sculptures, including 19 received from overseas artists. The second screening of eight full-sized sculptures was held in February 2000. This time, rather than choosing a Gold Award winner, the judges decided to issue two Silver Awards, which were received by Masamitsu Komuro for his "An Iron Boat" (shown top left) and Tamotsu Murakami for his "Emergence–Cicada–" (shown bottom left). The Bronze Award was given to Kenji Shimotori for his "Wrap-99-1."

Ground-Breaking Ceremony for the Mitaka Ghibli Museum of Art

On March 4, 2000, a ground-breaking ceremony was held for the art museum to be built in Inokashira Park, which is in the city of Mitaka within the Tokyo metropolis. Officially named Mitaka Municipal Animation Museum, the facility is generally referred to as the Mitaka no Mori Ghibli Museum of Art. Participating in the ceremony from Kajima were Chairman Rokuro Ishikawa and Vice President Yoshihiko Iwamatsu, as well as other staff involved with the museum's construction. Mitaka City has invited Museo d'Arte Ghibli, which is an affiliate of Tokuma Shoten Co., Ltd., to create the museum. The museum will be used to showcase the well-known "Tonari no Totoro" and "Mononoke Hime" works of Studio Ghibli Co., Ltd., along with that company's newly created animated features. Kajima's Tokyo Branch will handle the museum's construction, which is projected to be completed in June 2001. The museum will be open to visitors from October 2001.

Portal to Success in Japan
Kajima offers full-turnkey solutions for foreign companies seeking to establish bases in Japan.
Design and Construction
Pre-Implementation Consultation
Financing and Financial Advisory Services
Real Estate Development and Brokerage
Just In
Recent Projects
Contact Us
All rights reserved, Copyright(c) 2000 KAJIMA CORPORATION

http://www.kajima.co.jp/success/

Kajima Launches "Portal to Success in Japan" Home Page

On February 21, 2000, Kajima's web site (http://www.kajima.co.jp/welcome.html) was expanded with the addition of a "Portal to Success in Japan" section. The new section describes a variety of services that Kajima offers to foreign-based companies considering establishing a presence in Japan, such as preliminary consulting services as well as facility design, construction, financing, and real estate development services. Please take a look at the new section.

From Egypt

Special Cleaning Treatment for the Cairo Opera House

In January 2000, Kajima used its K-Pack technology to clean interior and exterior portions of the Cairo Opera House, which the Company constructed in 1988. The cleansing project was performed on behalf of an organization that promotes international cooperation for Japan's Ministry of Construction. To rectify the conspicuous soiling of walls and other items that has taken place during the 11 years since the opera house was completed, Egypt's Ministry of Culture requested Kajima's assistance in applying special cleansing technology that would have a minimal effect on adjacent areas and allow the facility to remain open to visitors throughout the project. The Company's Hayama Marine Science Laboratory handled the request. Kajima's K-Pack technology involves the application of a gel that is allowed to dry and forms a film. When the film is peeled off, the soiling adheres to the film and is easily removed. As the technology has the potential for widespread use in cleaning historical structures and other culturally valuable objects, related usage technology was transferred to local maintenance staff.

From the Netherlands

Three Kajima Projects Featured in Dutch Exhibition of Stadium Architecture

Three Kajima projects were spotlighted in a recent Netherlands Architecture Institute (NAI) program entitled "The Stadium: The Architecture of Mass Sport." Held from June 8 through September 24, 2000, this program includes a large public exhibition, an international symposium, and the publication of an accompanying book. Located in Rotterdam, the NAI is well-known worldwide as the largest architectural museum and a leading venue for architectural exhibitions. As Rotterdam will host the European Football Championships in 2000, the NAI decided to organize a concurrent exhibition for architects, designers, and users that presents

photos, models, and analyses of noteworthy stadiums throughout the world and also examines the role of sport architecture within the field of urban development.

The three Kajima-designed and built stadiums featured at the exhibition were:

- Nagano Olympic Memorial Arena (M-Wave)—Completed in 1996, this metal-roofed stadium has 76,000 square meters of floor space. It was one of the facilities used for the Nagano Winter Olympics in 1998.
- Izumo Dome—Completed in 1992, this membrane-roofed community dome has 16,000 square meters of floor space.
- Akita Sky Dome—Completed in 1990, this steel-framed, membrane-roofed community dome has 12,000 square meters of floor space.

From Singapore

Topping-Out Ceremony for Cantonment Complex

On April 3, 2000, the proposed Cantonment Complex was successfully topped out on schedule. The ceremony was attended by the Deputy Commissioner of Police, representing the client; President and Chief Executive Officer of PWD Consultants Pte. Ltd., representing the project consultant team; and the Deputy General Manager, Building Construction Technology Division, Kajima Corporation, representing Kajima Overseas Asia Pte. Ltd. (K.O.A.), and was witnessed by about 200 guests.

The proposed Cantonment Complex comprises a 25-story tower block, three podium blocks of nine stories, eight stories, and six stories each, and a four-level basement car park linking all the building blocks. This complex is being developed by the Ministry of Home Affairs (MHA) of the Government of Singapore and is one of the biggest projects thus far developed by the MHA Home Team. The consultants are PWD Consultants and the main contractor is Kajima Overseas Asia.

When completed in March 2001, the complex—which is located just outside the central business district—will have a total floor area of 111,900 square meters. It will be headquarters for the Criminal Investigation Department, 'A' Division Police, and the Central Narcotics Bureau.

KAJIMA CORPORATION

KAJIMA CORPORATION
Head Office
2-7, Motoakasaka 1-chome,
Minato-ku, Tokyo 107-8388, Japan
Telephone: 81-3-3404-3311
Facsimile: 81-3-3470-1444/5

KAJIMA CORPORATION
International Division
28th Floor, Shinjuku Park Tower Building,
7-1, Nishishinjuku 3-chome,
Shinjuku-ku, Tokyo 163-1028, Japan
Telephone: 81-3-5324-5880
Facsimile: 81-3-5324-5827

KAJIMA U.S.A. INC.
320 Park Avenue, 26th Floor,
New York, NY 10022-6815, U.S.A.
Telephone: 1-212-355-4571
Facsimile: 1-212-355-4576

KAJIMA EUROPE B.V.
London
Grove House 248 A, Marylebone Road,
London NW1 6JZ, U.K.
Telephone: 44-20-7465-0007
Facsimile: 44-20-7465-8788

KAJIMA OVERSEAS ASIA PTE. LTD.
1 Temasek Avenue,
#34-04 Millenia Tower,
Singapore 039192, Singapore
Telephone: 65-344-0066
Facsimile: 65-344-3777

URL: http://www.kajima.co.jp/

Printed in Japan